

Applicant: Andreas HUEHSAM
Docket No. R.305860
Preliminary Amdt.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-11. (Canceled)

12. **(New)** A method for applying an electrical insulation to a ferromagnetic body, provided with axial slots for receiving an electrical winding, of a primary element of an electrical machine, in which the body is coated with electrostatically charged plastic powder, the method comprising applying a powder coating having a layer thickness of between about 1.0 and 2.0 mm and preferably between about 1.0 and 1.5 mm by means of direct powder spraying onto the body while maintaining a potential difference between the body and the powder.

13. **(New)** The method as defined by claim 12, wherein the coating is done on the preferably grounded body that has a lower potential than the plastic powder.

14. **(New)** The method as defined by claim 12, wherein for the powder sprayed is a coarse plastic powder whose powder particles have a mean diameter greater than 150 μm .

15. **(New)** The method as defined by claim 13, wherein for the powder sprayed is a coarse plastic powder whose powder particles have a mean diameter greater than 150 μm .

16. **(New)** The method as defined by claim 12, wherein the powder spraying is performed with compressed air.

17. **(New)** The method as defined by claim 14, wherein the powder spraying is performed with compressed air.

18. **(New)** The method as defined by claim 12, wherein the powder spraying is performed in a closed spraying chamber, with a spray apparatus, which is connected to a high-voltage potential and is equipped with at least one spray location aimed at the body.

19. **(New)** The method as defined by claim 14, wherein the powder spraying is performed in a closed spraying chamber, with a spray apparatus, which is connected to a high-voltage potential and is equipped with at least one spray location aimed at the body.

20. **(New)** The method as defined by claim 16, wherein the powder spraying is performed in a closed spraying chamber, with a spray apparatus, which is connected to a high-voltage potential and is equipped with at least one spray location aimed at the body.

21. **(New)** The method as defined by claim 18, further comprising the steps of removing the plastic powder from a powder supply by means of suction, and delivering a metered quantity of powder to the spray apparatus by means of compressed air.
22. **(New)** The method as defined by claim 12, further comprising the step of subjecting the body to a cleaning process for removal of powder adhering to the surface of the body after the electrostatic powder spray-coating.
23. **(New)** The method as defined by claim 14, further comprising the step of subjecting the body to a cleaning process for removal of powder adhering to the surface of the body after the electrostatic powder spray-coating.
24. **(New)** The method as defined by claim 18, further comprising the step of subjecting the body to a cleaning process for removal of powder adhering to the surface of the body after the electrostatic powder spray-coating.
25. **(New)** The method as defined by claim 21, further comprising the step of subjecting the body to a cleaning process for removal of powder adhering to the surface of the body after the electrostatic powder spray-coating.
26. **(New)** The method as defined by claim 22, wherein the coated and cleaned body is subjected to a heating process that causes the firing of the powder coating.

27. **(New)** The method as defined by claim 26, further comprising the steps of cooling the body after the heating process.

28. **(New)** An apparatus for performing the method as defined by claim 21, comprising a spraying chamber, a conveyor belt penetrating the spraying chamber and carrying the body, a spray apparatus in the spray chamber with at least one spray location, a metering device upstream of the spray apparatus, a powder bin, and a pneumatic powder conveyor which aspirates powder from the powder bin and delivers it to the metering device.

29. **(New)** An apparatus for performing the method as defined by claim 22, comprising a spraying chamber, a conveyor belt penetrating the spraying chamber and carrying the body, a spray apparatus in the spray chamber with at least one spray location, a metering device upstream of the spray apparatus, a powder bin, and a pneumatic powder conveyor which aspirates powder from the powder bin and delivers it to the metering device.

30. **(New)** An apparatus for performing the method as defined by claim 26, comprising a spraying chamber, a conveyor belt penetrating the spraying chamber and carrying the body, a spray apparatus in the spray chamber with at least one spray location, a metering device upstream of the spray apparatus, a powder bin, and a pneumatic powder conveyor which aspirates powder from the powder bin and delivers it to the metering device.

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31. **(New)** An apparatus for performing the method as defined by claim 27, comprising a spraying chamber, a conveyor belt penetrating the spraying chamber and carrying the body, a spray apparatus in the spray chamber with at least one spray location, a metering device upstream of the spray apparatus, a powder bin, and a pneumatic powder conveyor which aspirates powder from the powder bin and delivers it to the metering device.

32. **(New)** The apparatus as defined by claim 28, wherein said powder bin and and spraying chamber are integrated into a common housing.